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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,700	07/27/1999	PIERRICK DESCURE	S1022/8201	5850
7590 10/14/2004			EXAMINER	
JAMES H MORRIS WOLF GREENFIELD & SACKS PC FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE BOSTON, MA 022102211			MUNSON, GENE M	
			ART UNIT	PAPER NUMBER
			2811	
DATE MAILED: 10/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

# Office Action Summary

Application No. 09/361,700	Applicant(s) P. DESURE	
Examiner G. MUNSON	Group Art Unit 2811	

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 24 May, 26 July 2004
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-18, 27-39 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 1-11, 28-31, 35 is/are allowed.
- ☒ Claim(s) 12-18, 27, 32-34, 36-39 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5/24/04
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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Claims 36-39 are rejected under 35 U.S.C. 112, first paragraphs. The claims do not agree with the specification, page 3, lines 29-31.

The “wherein . . .” clauses (claims 12, 17, 27) are taken as a possible desired result, or inherent, of the structure otherwise claimed, rather than an additional structural limitation. The “determined thickness” (claims 12, 17, 27) is not limited, because *any* “thickness” would be proportional, namely have some ratio, to a given wavelength.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-15, 17, 32 and 33 are rejected under 35 U.S.C. 103 as unpatentable over Koike et al. See Figure 2, column 4, lines 4-7, 46-52. Since Koike et al (column 4, lines 4-7, 46-52) teach to

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have conductive films fixed to a predetermined voltage which may be ground potential, it would have been obvious to have the substrate 1 at ground potential and the conductive film electrodes 13 (Figure 2) either connected to the substrate 1 or via a fixed potential. The “interference filter” insofar as claimed reads on “silicon oxide” layer 12R, 12G, 12B and “polysilicon” layer 13; the “regions” read on photodiode regions 5R, 5G, 5B. The claims remain broad in scope.

Claims 12, 13, 17, 32 and 33 are rejected under 35 U.S.C. 102 as unpatentable as shown by Nagasaki et al. See Figures 1, 3. A “region” (claims 12, 17) reads on region 2; the “interference filter” insofar as claimed reads on “insulating” layer 4 and “conductive” layer 9 or 21. The claims remain broad in scope.

Claims 27 and 34 are rejected under 35 U.S.C. 103 as unpatentable over Koike et al, as in the above rejection, considered together with Merrill '744. It would have been obvious to have photodiodes as in Koike et al (Figure 2), in a well region as suggested by Merrill (Figure 7) with a “base substrate” similar to region 50 of Merrill, in order to provide isolation for the photodiodes.

Claim 18 is rejected under 35 U.S.C. 103 as unpatentable over Koike et al, as in the above rejection of claim 17, further considered together with Nagano. For a connection of an electrode as in Koike et al (Figure 2) to a substrate, it would have been obvious to use a “heavily” doped region, as in Nagano (Figure 3, region 5a), in order to provide a low resistance ohmic contact region for the connection.

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Claim 18 is rejected under 35 U.S.C. 103 as unpatentable over Nagasaki et al, as in the above rejection of claim 17, considered together with Nagano, applied as in the above rejection.

Claims 12, 17, 18, 27 and 32-34 are rejected under 35 U.S.C. 102 as unpatentable as shown by Motojima et al. See Figure 5. The “interference filter” insofar as claimed reads on “insulating” layer 6<sub>2</sub> and “conductive” layer 4. The “conductive portion” includes wiring 5a. The “capacitance” (claims 32-34) is inherent of the structure claimed in claims 12, 17 and 27.

Claim 16 is rejected under 35 U.S.C. 103 as unpatentable over Koike et al, as in the above rejection of claim 15, further considered together with Motojima et al. It would have been obvious to use a silicon nitride layer, as in Motojima et al (Figure 5, layer 8; column 3), over electrodes 13 of Koike et al (Figure 2) in order to provide passivation.

The references are all of record.

The arguments in the response, filed 26 July 2004, have been considered but are not wholly persuasive. The *claimed* structure of the “interference filter” still does not distinguish over the same structure in Koike et al, Nagasaki et al and Motojima et al, which all disclose the claimed “conductive” layer over an “insulating” layer. Applicant’s “difficulty lies in the breadth of the claims.” *In re Sovish*, 226 USPQ 771, 774 (Fed. Cir. 1985). The scope of claims 12, 17 and 27 are not commensurate with the arguments about thickness of materials of an interference filter in the response (pages 11-15).

Claims 1-11, 28-31 and 35 are allowed, over the art of record.

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This action is **FINAL**.

This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims appealed. The Notice of Appeal must be accompanied by the required appeal fee of appropriate amount.

If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

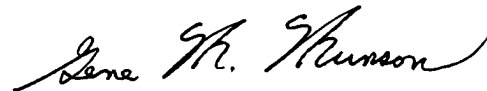
A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing, whichever is longer, of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Munson  
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10/12/04



GENE M. MUNSON  
EXAMINER  
GROUP ART UNIT 2811